Cotton/Soybean Insect Newsletter

Volume 12, Issue #1 Edisto Research & Education Center in Blackville, SC 5 May 2017

Pest Patrol Alerts

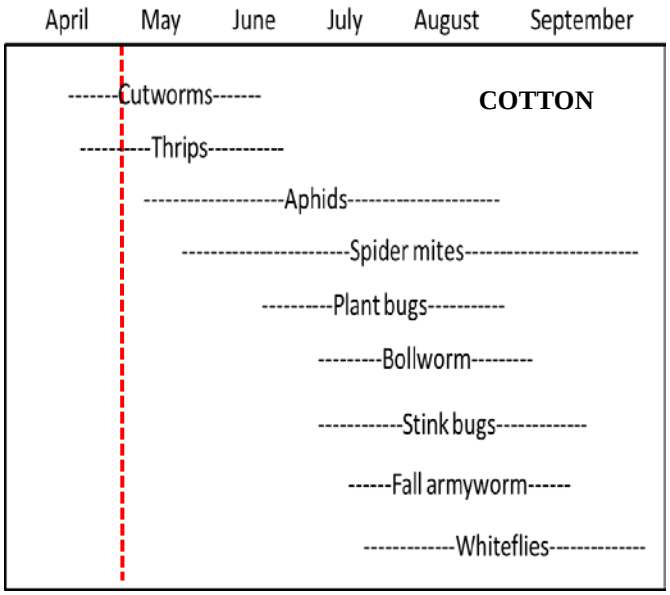
The information contained herein each week is available via text alerts that direct users to online recordings. I will update the short message weekly for at least as long as the newsletter runs. After a new message is posted, a text message is sent to alert users that I have recorded a new update. Users can subscribe for text message alerts for my updates in two easy steps. Step one: register by texting **pestpat7** to 97063. Step two: reply to the confirmation text you receive by texting the letter "y" to complete your registration. Pest Patrol Alerts are sponsored by Syngenta.

Updates on Twitter

When noteworthy events happen the in the field, I will be sending them out quickly via Twitter. If you want to follow those quick updates, follow me at @bugdocisin on Twitter.

News from Around the State

Andrew Warner, county agent in Hampton County, reported that he is finding plenty of stink bugs in early corn; thrips seem to be low in cotton so far, but grasshoppers are the big issue at this point. **Drake Perrow**, a consultant and producer, also mentioned that there was no shortage of grasshoppers in the fields he has put eyes on so far. He said that he has not seen this many grasshoppers for years. **Charles Davis**, county agent in Calhoun County, also commented independently about the impending "plague" of grasshoppers. He said "…grasshoppers are rampant this year. I guess the mild winter kept them safe and happy. They will be something we have to deal with when this cotton crop finally gets in the ground."



Cotton Situation

As of 30 April 2017, the USDA NASS South Carolina Statistical Office estimated that about 18% of the crop has been planted, compared with 2% the previous week, 15% at this time last year, and 12% for the 5-year average.

Cotton Insects

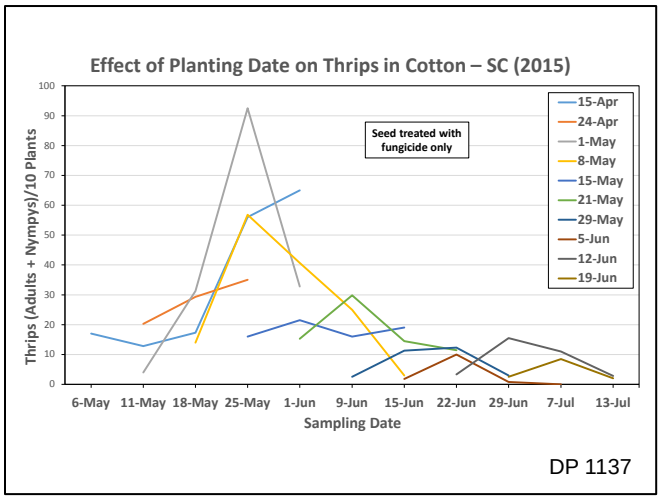
Thrips, grasshoppers, cutworms, etc., are about it right now, with grasshoppers dominating the conversation so far. Be watchful for issues with seedlings and grasshoppers. The best way to avoid problems with

grasshoppers is to put some time between your burndown spray and planting. If the vegetation (weeds or a cover crop) is allowed to stay green up close to planting, your risk for having issues are elevated. Insects will simply move from the burned down plants to your emerging cotton, so give the burndown some time before planting. Many of the insects will move along, if the field is barren for a while. While this will help tremendously, pods of grasshopper eggs will remain in the soil to hatch later, so you must keep an eye out for hatching pods. Young grasshoppers are fairly easy to control. When they mature and become large insects, insecticides are less effective on the large-bodied adults, as you just cannot get enough active ingredient into them.

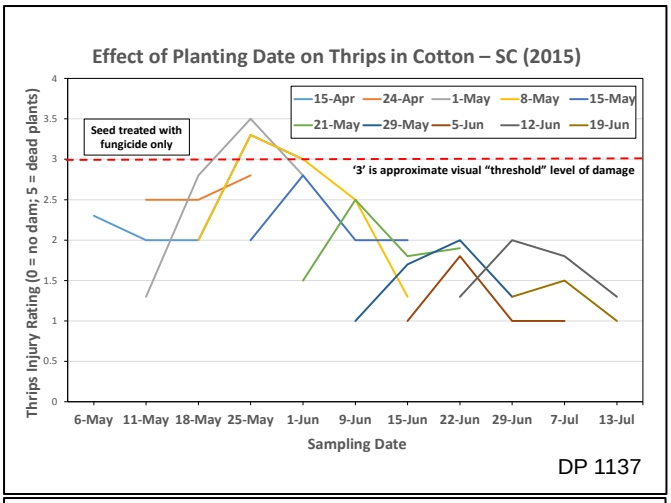
Thrips are, of course, another group of insects to monitor as seedlings emerge. We helped provide data for the development and refinement of a model to predict risk from thrips (specifically tobacco thrips) injury in cotton, and you can use that tool to estimate the risk of your fields with planting date as a VERY important variable. The model uses weather data (historical and forecasted), biological information about tobacco thrips, and many other parameters to calculate risks. Here is the link to the model called the Thrips Infestation Predictor (TIP) for Cotton: http://climate.ncsu.edu/cottonthripsrisk/
Thank the sponsors listed below for the funding to support the development of this valuable tool. To use the TIP tool for cotton, select your field location on the map (zoom in and mark the field with a pin…the coordinates are displayed), enter your planned planting date, and hit 'Submit' to see the results. You will get a series of charts. The first chart will show you risk comparisons for the current year and the previous 5 years. This gives a relative comparison across recent years, so you can use your memory and experiences from recent years to see how this year will likely look. The second chart shows how planting date for your field will impact risk for thrips injury. 'Red' represents elevated risk on that planting date, and 'green' represents reduced risk for that planting date. Right now, May planting is looking good for reduced risk for the southern part of the state, but in the middle of the Coastal Plain and Pee Dee region of SC, plantings in early to mid-May are showing elevated risk for thrips injury. So, consider planting later in May to help mitigate issues with thrips. On the next page are some data charts from our research on the effect of planting date on populations of and damage from thrips in cotton. The work in SC was sponsored by the SC Cotton Board and growers in SC and Cotton Incorporated (CI), so thank the Board, local cotton growers, and representatives with CI for supporting our research. The charts show peak populations of thrips and injury in cotton planted on various dates in Blackville, SC, for 2015 and 2016. Also, the yield information is very interesting, particularly when you look at variety and maturity. Products for thrips control include the options here.

Insecticide Options for Thrips

- At-plant options
  - Do nothing…not an option…unless planting late?
  - Neonicotinoid seed treatments (thiamethoxam [Cruiser, Avicta) and imidacloprid (Gaucho, Aeris)
  - Hopper-box treatment (acephate)
  - In-furrow granular material
    - Aldicarb (Temik, AgLogic)
    - Phorate (Thimet)
  - In-furrow liquid material
    - Imidacloprid (Admire Pro, Velum T., etc.)
    - Acephate (Orthene, etc.)
  - A combination of the above
- Post-plant options
  - Foliar sprays (acephate, Radiant, etc.)



DP 1137



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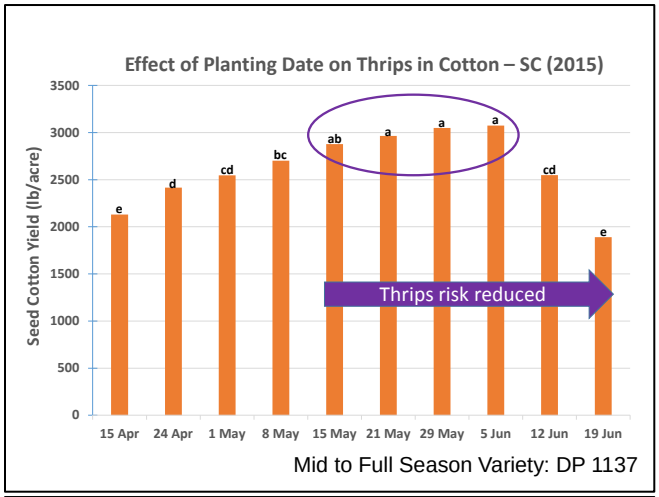
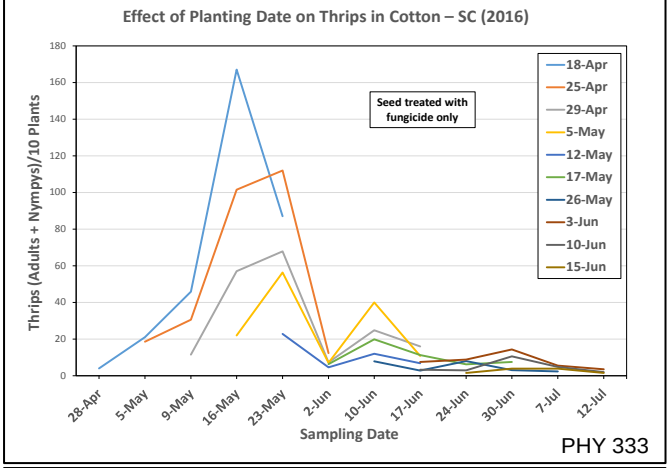
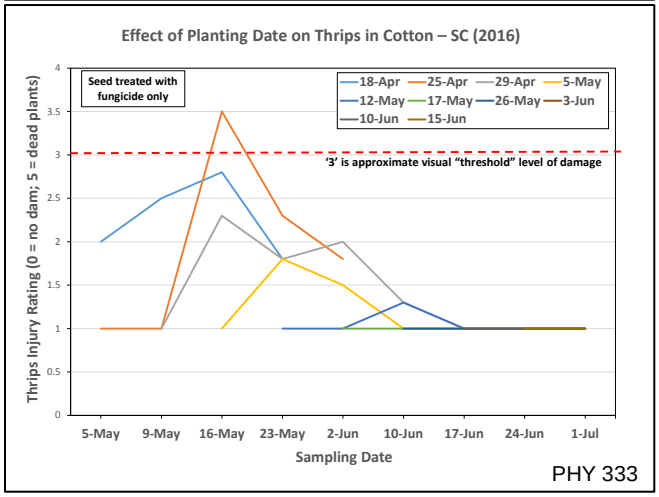


Mid to Full Season Variety: DP 1137



PHY 333



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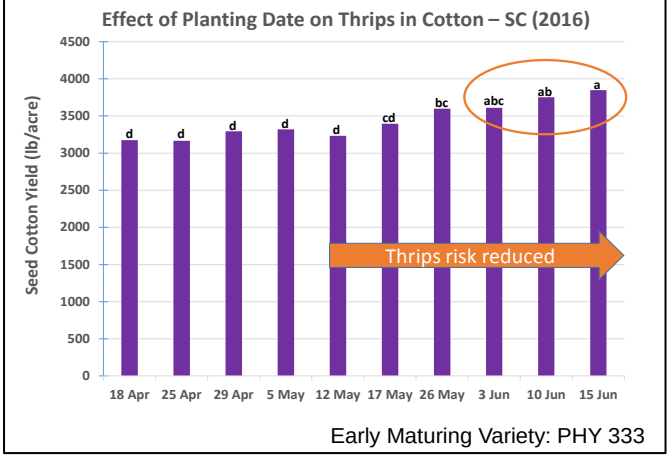


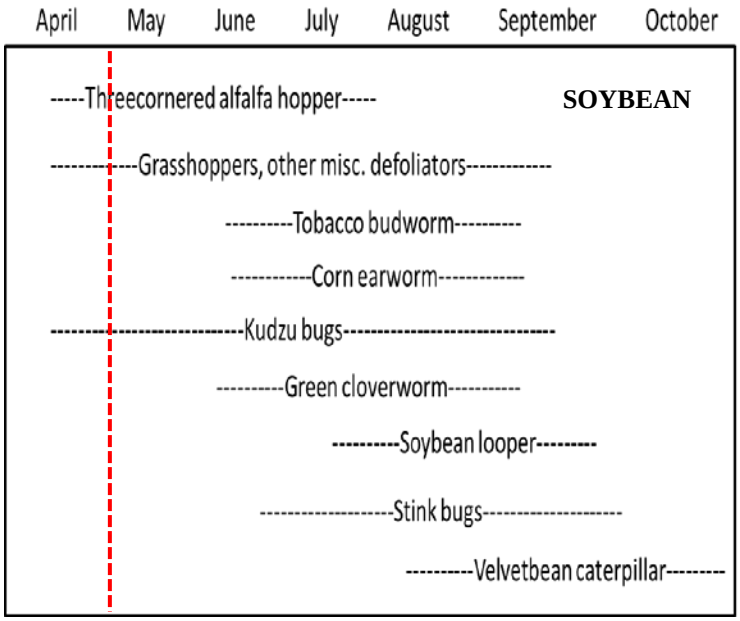
Early Maturing Variety: PHY 333

Soybean Situation

As of 30 April 2017, the USDA NASS South Carolina Statistical Office estimated that about 5% of our soybean crop has been planted, compared with 0% the previous week, 1% at this time last year, and 7% for the 5-year average. These are observed/perceived state-wide averages.

Soybean Insects

We are still very early into planting for soybeans, so there are few issues with insects at this point. However, potential problems with grasshoppers (covered in the 'Cotton Insects' section) apply to soybeans also. Here is another issue that should be discussed earlier than usual, if at all – injury from hoppers, primarily threecornered alfalfa hopper. This insect can move in on early vegetative soybeans before we typically do much scouting and cause damage that goes unnoticed until much later. The stem girdling caused by feeding can weaken plants, cause stand loss, or lodging later, resulting in lost yield. We might be seeing more damage on early planted soybeans – maybe…something to watch. The other insect on the chart here in early May is kudzu bug. The naturally occuring fungus *Beauveria bassiana* and other beneficial organisms have helped regulate populations of kudzu bugs, so their pest status has been lowered in our region. However, because the fungus occurs in the soil, we should not be surprised if a field not planted to soybeans for some time develops an isolated problem with kudzu bugs, as the inoculum will not be present at high levels in the soil in that field. I would not forget about kudzu bugs in fields that have not been planted to soybeans for years.



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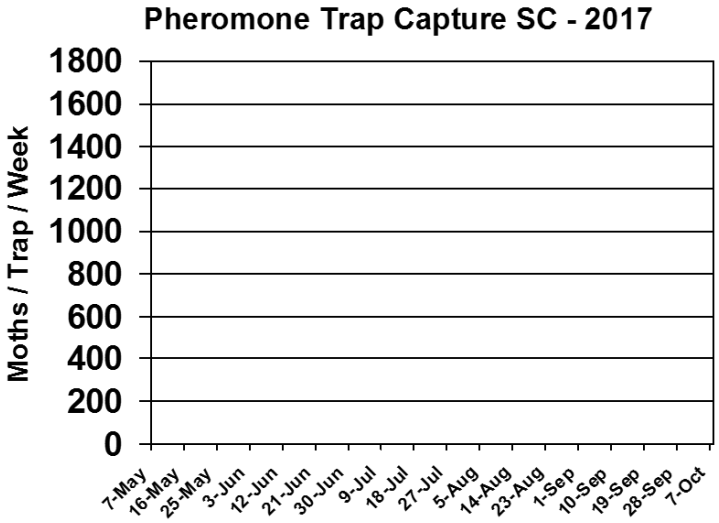
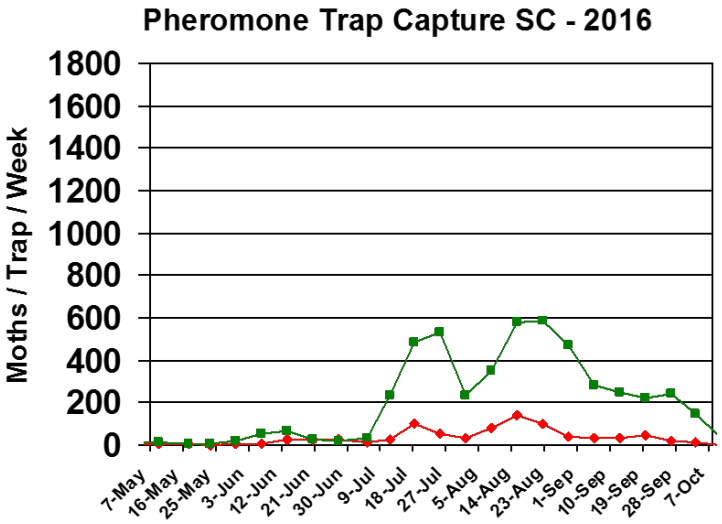
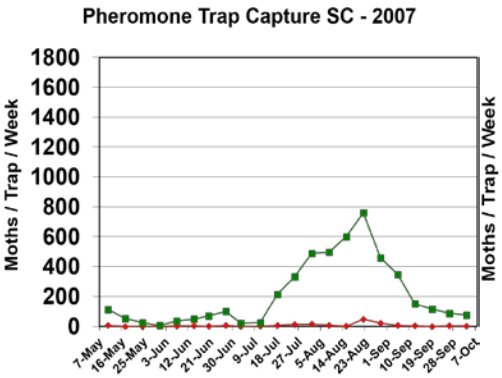
Bollworm & Tobacco Budworm

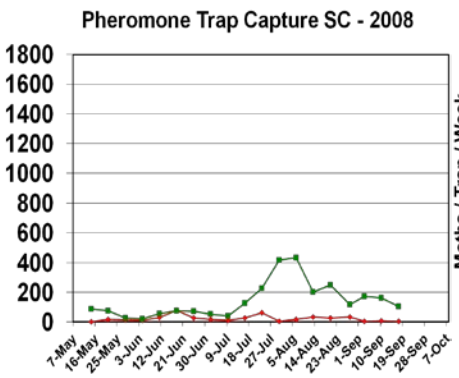
Captures of bollworm (BW) and tobacco budworm (TBW) moths in pheromone traps at EREC this season are shown below, as are the captures from 2016 for reference. Tobacco budworm continues to be important for our soybean acres and for any acres of non-Bt cotton. I provide these data as a measure of moth presence and activity in our local area near my research plots. The numbers are not necessarily representative of the species throughout the state.

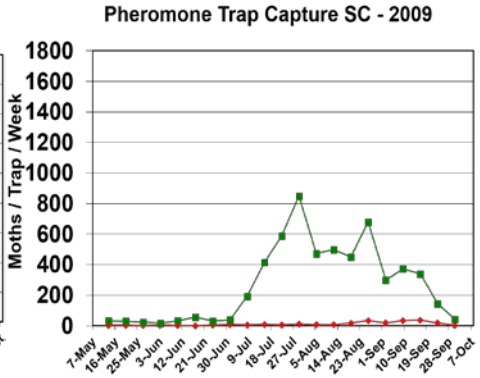


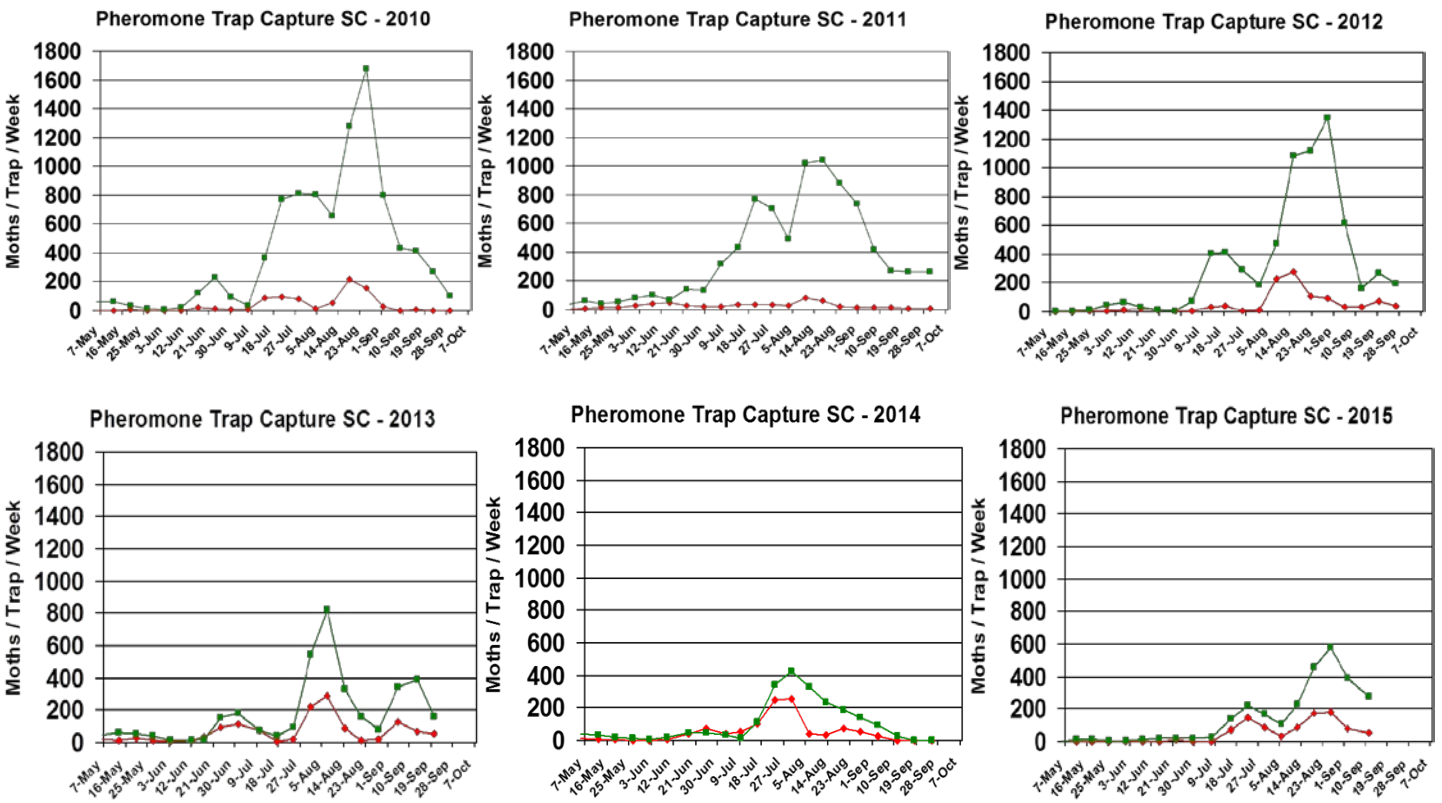


Trap data from 2007-2015 are shown below for reference to other years of trapping data from EREC:









Pest Management Handbook – 2017

Insect control recommendations are available online in the 2017 South Carolina Pest Management Handbook at: http://www.clemson.edu/extension/agronomy/pest%20management%20handbook.html

Free Mobile Apps: "Calibrate My Sprayer" and "Mix My Sprayer"

Download our free mobile apps called "Calibrate My Sprayer" and "Mix My Sprayer" that help check for proper calibration of spraying equipment and help you with mixing user-defined pesticides, respectively, in custom units (available in both iOS and Android formats): http://www.clemson.edu/extension/mobile-apps/

Need More Information?

For more Clemson University Extension information: http://www.clemson.edu/extension/

For historical cotton/soybean insect newsletters:
http://www.clemson.edu//extension/agronomy/cotton1/newsletters.html

Sincerely,

Jeremy K. Greene, Ph.D.
Professor of Entomology

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http://www.clemson.edu